



Project 1: Standardized Test Analysis

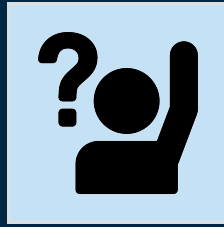
Alyssia Oh

TABLE OF CONTENTS



1.

Background



2.

Problem Statement



3.

Analysis

Background

- Traditionally, SAT and ACT scores have been required by colleges for admissions
- The effectiveness of standardized tests to measure students' aptitude remains controversial
- More colleges are opting to drop standardized tests as requirements for application
- Despite this recent trend, more states are mandating juniors/seniors to take the test, which in turn may encourage students to attend college and pursue higher education

Problem Statement

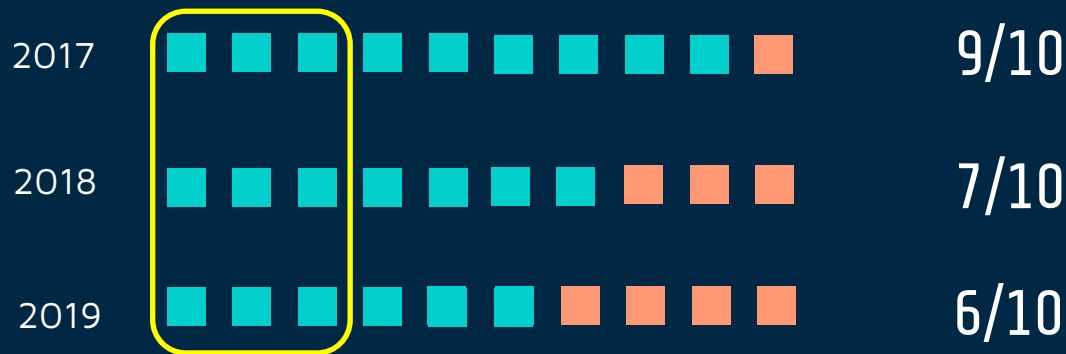
Does participating in standardized tests such as SAT improve education attainment in America?

Data sets used for analysis:

- SAT_2017.csv
- SAT_2018.csv
- SAT_2019.csv
- Education attainment(HS/Bachelor's/Advanced) by US States_2013--2017.csv

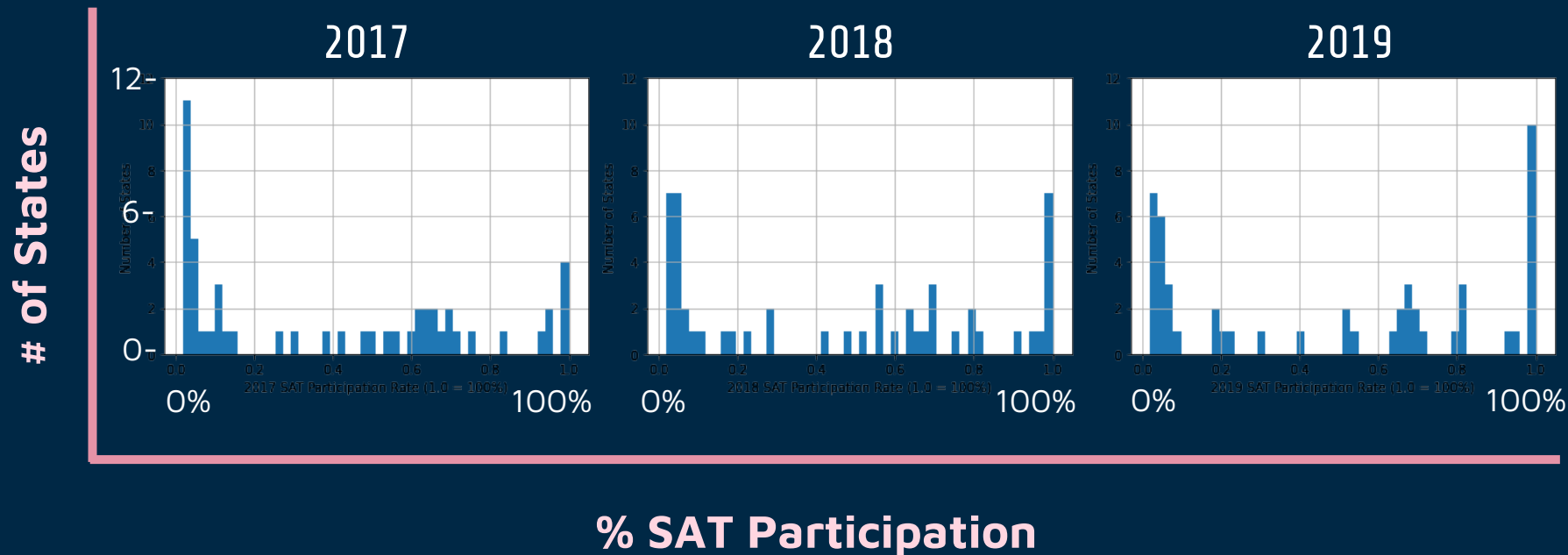
Exploratory Data Analysis

Top 10 States with Highest Percentage of College Degree
Above 75th Percentile SAT Participation



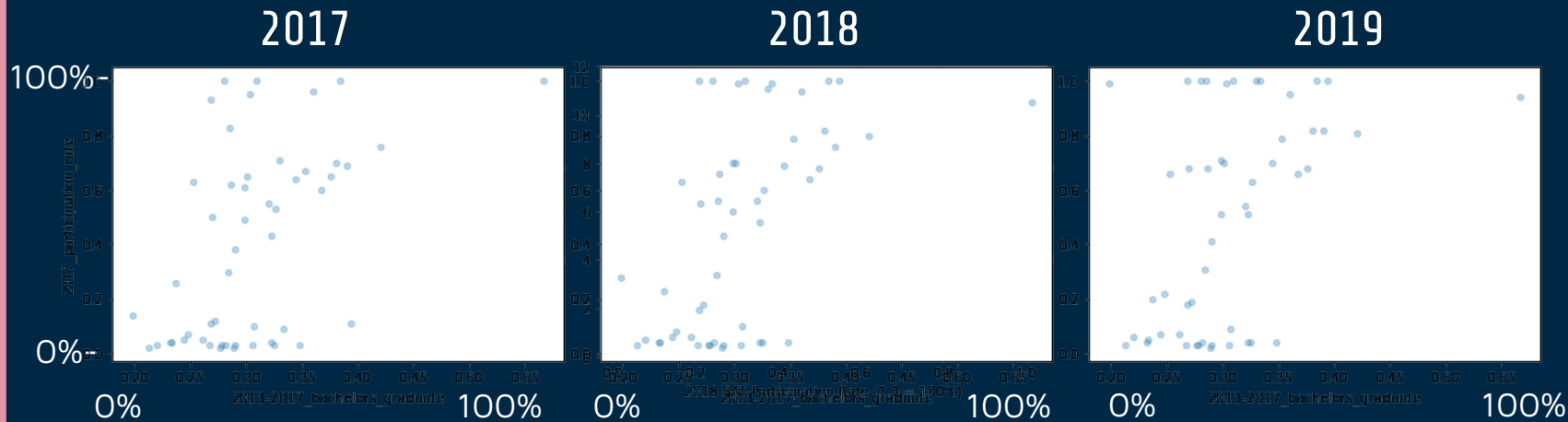
3/10 in all three years

Exploratory Data Analysis



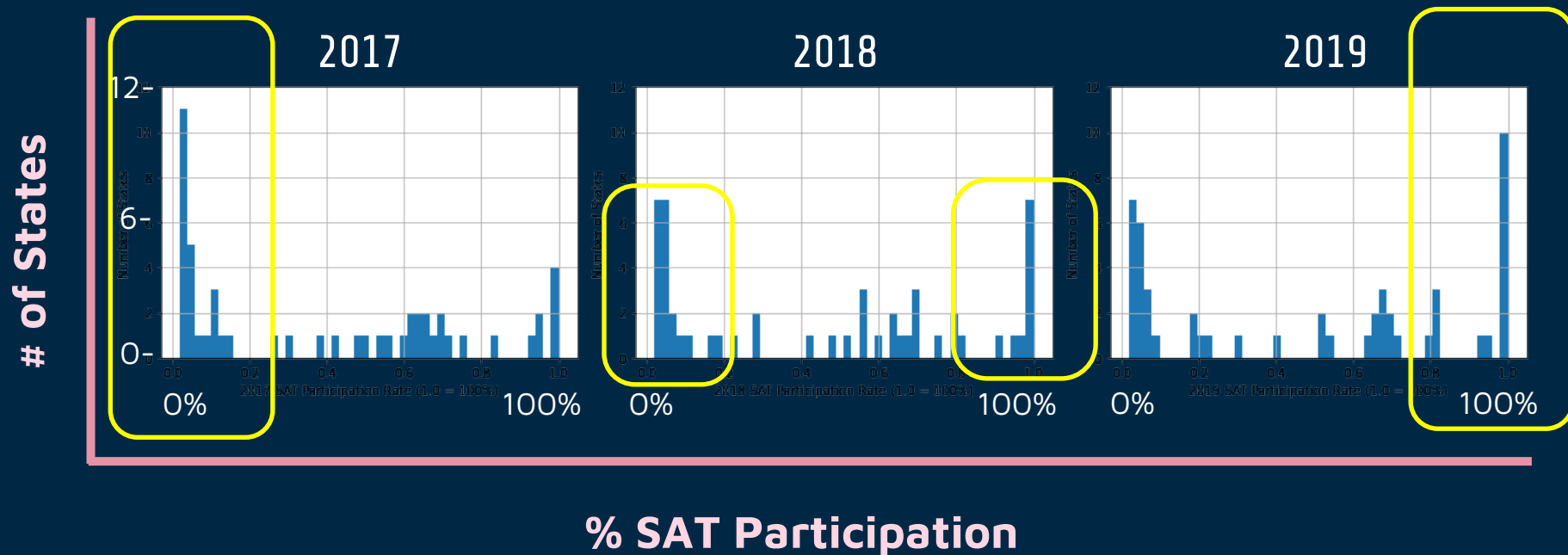
Analysis

% SAT Participation



% college graduate

Exploratory Data Analysis



Conclusion/Caveat

- Weak correlation observed; however, correlation \neq causation
- Dataset is limited – more states started adopting SAT as standardized assessment test after its format change in 2016
- Return per \$ investment had not been optimized
- If more colleges abandon SAT, the incentive for students diminishes